REMARKS

The Office Action dated September 19, 2007 has been received and reviewed. Claims 1-25 are pending in the subject application. All claims stand rejected. Claims 1, 4, 16, and 20 have been amended herein. Reconsideration of the subject application is respectfully requested in view of the above amendment and the following remarks.

Rejections based on 35 U.S.C. § 112

Claim 4 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to distinctly claim the subject matter of the invention. The Office Action specifies that the limitation "the predetermined time period" has an insufficient antecedent basis for this limitation in the claim. Claim 3 recites, in part, "summing the utilization values collected for each of the links connecting a Point of Presence pair of a *predetermined time period.*" (emphasis added). Applicants have amended claim 4 to depend from claim 3. As such, it is believed that claim 4, as amended herein, has a sufficient antecedent basis and, accordingly, the objection to claim 4 has been overcome.

Rejections based on 35 U.S.C. § 102

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdeggal Brothers v. Union Oil co. of California*, 814 F.2d 628, 631 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 2 USPQ 2d 1913, 1920 (Fed. Cir. 1989). *See also*, MPEP § 2131.

In the Final Office Action dated September 19, 2007, claims 1-3, 5-12, 14-18, 20, and 21 are rejected under 35 U.S.C. 102(e) as being unpatentable by U.S. Publication No.

2002/0143928 to Maltz et al. (hereinafter "the Maltz reference"). The claims of the present application include independent claims 1, 5, 16, and 20. Applicants respectfully traverse the rejection of claims 1-3, 5-12, 14-18, and 20-21, as hereinafter set forth.

Referring initially to independent claim 1, a method for determining link utilization in an IP network is recited. Claim 1, as amended herein, provides a method including collecting utilization values for links in the IP network over a predetermined polling period; collecting topographical information for links in the IP network, the *topological information identifying each link connecting each adjacent Point of Presence pair*; and correlating the link utilization values with the topological information.

By contrast, the Maltz reference fails to disclose collecting *topological information* for links, as set forth in amended independent claim 1. As used in the Maltz reference, network topology information "allows the TMS Statistics Collection Server . . . to know where to go to collect the desired information. The network topology information . . . preferably comprises (1) a list of network elements from which a given TMS Statistics Collection Server should collect information, (2) information identifying the type of equipment (i.e., vendor and product ID) comprising each network element, and (3) information indicating how communication should take place with that network element." *See, Maltz* at ¶ [0080].

While the Maltz reference refers to network topology information, it is respectfully submitted that the Maltz reference fails to disclose collecting topological information, as recited in amended independent claim 1, where the topological information identifies each link connecting each adjacent Point of Presence pair. Rather, the network topology information, as used in the Maltz reference, merely describes where the desired information may be collected. Accordingly, the Maltz reference does not discuss collecting

topological information for links, as recited in amended claim 1, where the topological

information identifies *each link connecting each adjacent Point of Presence pair.*

Independent claim 5 is directed to a method for determining link utilization in an

IP network. The method includes, among other things, summing the link utilization values for

each link connecting a pair of Points of Presence.

The Maltz reference, on the other hand, discloses "algorithms for computing the

paths over which traffic demands should be routed . . . ." *See, Maltz* at ¶ [0047]. "The objective

function is written to maximize the sum of traffic along all paths. *Id.* at ¶ [0049]. While the

Maltz reference discloses maximizing the sum of traffic along all paths, it is respectfully

submitted that the Maltz reference does not disclose summing the link utilization values for *each*

link connecting a pair of Points of Presence. Rather, the Maltz reference merely discusses

maximizing the sum of traffic along all paths. This is in stark contrast to the method recited in

independent claim 5, wherein link utilization values for *each link connecting a pair of Points of*

Presence are summed.

Independent claim 16, as amended herein, is directed to a method for determining

aggregate link utilization between two Points of Presence. The method recites, among other

things, multiplying the average by the number of links connecting the two Points of Presence to

calculate a measure of total traffic flowing between the two Points of Presence that is

insignificantly effected by one or more missing utilization values.

By contrast, the Maltz reference is directed to a "method and system of

hierarchical collection and storage of traffic information-related data in a computer network."

See, Maltz at ¶ [0068]. The Maltz reference discloses that it may perform a "missing value

calculation (if the network element is unable to provide the value of a statistic for some

measurement period, the processor can fill in a value for the missing statistic by reusing the value from a previous measurement period)." *See id.* at ¶ [0068]. In addition, the Maltz reference recites that "[i]f predictions are formed by averaging the last 10 measurements, then the TMS Statistics Collection Server can be equipped with enough storage so that it can store 10*X bytes of network information." *See id.* at ¶ [0074].

        While the Maltz reference discusses performing missing value calculations by utilizing a value from a previous measurement period, it is respectfully submitted that the Maltz reference does not discuss multiplying the average by the number of links connecting the two Points of Presence to calculate a *measure of total traffic* flowing between *two Points of Presence* that is not significantly effected by missing utilization values. Rather, the Maltz reference merely mentions that it utilizes a value from a previous measurement period in place of a missing value. *Replacing a missing value* with a value from a previous measurement period is in stark contrast to multiplying the average by the number of links connecting the two Points of Presence to calculate a *measure of total traffic* flowing between *two Points of Presence* that is *not significantly effected by missing utilization values.*

        In addition, while the Maltz reference discloses forming predictions by averaging the last 10 measurements, it is respectfully submitted that the Maltz reference fails to disclose *multiplying the average by the number of links* connecting the two Points of Presence to calculate a *measure of total traffic* flowing between the two Points of Presence that is insignificantly effected by one or more missing utilization values. Rather, the Maltz reference merely discloses forming predictions by averaging *previous measurements.* As such, the Maltz reference does not disclose that a *measure of total traffic flowing between two Points of Presence* is calculated by

multiplying the *average* by the *number of links* connecting the two Points of Presence, as recited in independent claim 16.

Claim 20, as amended herein, is directed to machine readable media for causing at least one network management station in an IP network to perform a method for determining link utilization in an IP network. The method includes, among other things, *collecting topological information* from the routers at one or more second *predetermined time interval*s, the topological information identifying each link connecting the pair of Points of Presence.

By contrast, the Maltz reference fails to disclose collecting *topological information* from the routers at *predetermined time intervals*, as set forth in independent claim 20. As used in the Maltz reference, network topology information "allows the TMS Statistics Collection Server . . . to know where to go to collect the desired information. The network topology information . . . preferably comprises (1) a list of network elements from which a given TMS Statistics Collection Server should collect information, (2) information identifying the type of equipment (i.e., vendor and product ID) comprising each network element, and (3) information indicating how communication should take place with that network element." *See, Maltz* at ¶ [0080]. In addition, the Maltz reference discusses that it may perform "scheduling (the processor can schedule when statistics should be collected from the network elements and when the resulting information should be transmitted to the remote storage)." *See id.* at ¶ [0068].

While the Maltz reference refers to network topology information, it is respectfully submitted that the Maltz reference fails to disclose *collecting topological information* from the routers at one or more *second predetermined time intervals*, as recited in independent claim 20, where the topological information identifies each link connecting the pair of Points of Presence. Rather, in the Maltz reference, scheduling merely refers to collecting

statistics from the network elements and transmitting the statistics to remote storage. Such a scheduling of *statistic* collection, as specified in the Maltz reference, does not disclose collecting *topological information* at *predetermined time intervals*, as recited in amended claim 20, where the topological information identifies each link connecting the pair of Points of Presence.

As the Maltz reference does not describe each and every element of independent claims 1, 5, 16, and 20, Applicants respectfully request withdrawal of the § 102(e) rejections with regard to claims 1, 5, 16, and 20. Each of claims 2-3, 6-12, 14-15, 17-18, and 21, depend, either directly or indirectly, from independent claims 1, 5, 16, and 20. As such, these claims are also believed to be in condition for allowance for at least the above-cited reasons. Accordingly, Applicants also respectfully request withdrawal of the § 102(e) rejections with regard to those claims. Each of claims 1-3, 5-12, 14-18, and 20-25 are believed to be in condition for allowance and such favorable action is respectfully requested.

Rejections based on 35 U.S.C. § 103

Claims 4, 13, 19, and 22-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over by U.S. Publication No. 2002/0143928 to Maltz et al. (hereinafter "the Maltz reference"). Applicants submit that a *prima facie* case of obviousness for the rejection of claims 4, 13, 19, and 22-25 under § 103 (a) has not been established.

As the Maltz reference fails to teach or suggest all of the claimed features of claims 4, 13, 19, and 22-25, Applicants traverse the rejection. As discussed above, the Maltz reference fails to teach or suggest all of the claimed features of the rejected independent claims 1, 5, 16, and 20 from which claims 4, 13, 19, and 22-25 depend. Thus, withdrawal of the 35 U.S.C. § 103 rejection of claims 4, 13, 19, and 22-25 is respectfully requested. Claims 4, 13, 19, and 22-25 are believed to be in condition for allowance and such favorable action is requested.

CONCLUSION

For at least the reasons stated above, claims 1-25 are now in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned to resolve the same. It is believed that no fee is due, however, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 21-0765.

Respectfully submitted,

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